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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,257	01/04/2002	Hiroyuki Atarashi	214472US2PCT	8789
22850	7590	02/24/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HOANG, THAI D	
			ART UNIT	PAPER NUMBER
			2668	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,257

Applicant(s)

ATARASHI ET AL.

Examiner

Thai D. Hoang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Election filed on 11/30/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

H. Nguyen

HANH NGUYEN
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02/21/02; 01/06/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling because it is a single means claim. A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983).

Claim Objections

Claims 7-8 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 7-8 recited "A mobile radio packet transmission method as claimed in claim ...", but previous claims did not claim a mobile radio packet transmission method. Similarly, claim 27 recited "[T]he uplink packet transmission as claimed in claim 10...", but claim 10 did not claim the uplink packet transmission.

Claim 27, the statements "the base station", "the mobile stations" and "the uplink packet" found no basic. Previous paragraphs did not define a base station, mobile stations and uplink packet.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-2 and 10 are rejected under 35 U.S.C. 102(a) as being unpatentable by Williams, US Patent No. 5,867,764.

Regarding claim 1, Williams discloses a system called "Hybrid return gate system in a bidirectional cable network." Williams teaches that the system comprises reservation timeslots 415-416, 415,426 and 435-436, see figure 4, abstract, col. 6, lines 21-41. The system disclosed by Williams performs time multiplexing all of packets in timeslots, col. 8, lines 29-34. In addition, Williams discloses that the system comprises a data modulator 345, which may use CDMA modulation.

Regarding claim 2, since Williams discloses the data modulator 345 may use CDMA modulation. Therefore, if data modulator is a CDMA modulator, the system must assign a number of spreading codes to reservation timeslots. As indicated above, the system disclosed by Williams performs time multiplexing all of packets in timeslots, col. 8, lines 29-34.

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Regarding claim 10, Williams discloses that the time slots can be categorized as short contention time slots and long contention time slots, col. 5, lines 42-44.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-8, 13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams as shown above, in view of Chuah et al, US patent No. 6,693,952, hereafter referred to as Williams and Chuah respectively.

Regarding claim 3, Williams discloses that the reservation of the timeslots is dynamically allocated based on demand of the system; col. 5, lines 53-65. Williams does not disclose the allocation based on a predetermined value. Chuah discloses a method and system called "Dynamic code allocation for downlink shared channels." Chuah teaches that the system allocates codes base on a threshold value, col. 5, lines 25-35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the method disclosed by Chuah into Williams' system in order to optimize bandwidth of the system.

Regarding claims 4-6, since Williams discloses the data modulator 345 may use CDMA modulation and the reservation of the timeslot is dynamically allocated based on demand of the system; col. 5, lines 53-65. Therefore, the system could be able to decreasing spreading codes of the reservation packet, and increasing spreading codes

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of the data packets. Williams does not disclose the allocation based on a predetermined value. However, Chuah teaches that the system allocates codes base on a threshold value, col. 5, lines 25-35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the method disclosed by Chuah into Williams' system in order to optimize bandwidth of the system.

Regarding claims 7-8 and 10, Williams discloses the reservation packets, but does not disclose data packet rate and available spreading codes. However, Chuah teaches that the system measures data rate and determines available codes for allocation, col. 5, lines 16-35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the method disclosed by Chuah into Williams' system for advantages cited above with respect to claim 3.

Regarding claim 13, Williams discloses the reservation packets are confirmed broadcasted by time multiplexing to the user. Williams does not teach other features as recited in the claim. However, Chuah discloses the system determines data rate and codes from available codes for allocation to the user, col. 5, lines 16-35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the method disclosed by Chuah into Williams' system for advantages cited above with respect to claim 3.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams as shown above, in view of Esmailzadeh, US patent No. 6,259,724 B1, hereafter referred to as Williams and Esmailzadeh respectively.

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Regarding claim 27, Williams does not teach the system uses random access packet for accessing. However, Esmailzadeh discloses a system called "Random access in a mobile telecommunications system." Esmailzadeh teaches the system perform random access request packet between a base station and mobile stations for allocation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the method disclosed by Esmailzadeh into Williams' system in order to optimize bandwidth of the system.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to the application:

US Patent No. 6,791,994 B1, Young et al, "Method and apparatus for assigning receive slots in a dynamic assignment environment."

US Patent No. 6,396,868 B1, Yoon et al, "Spread spectrum signal generating device and method in transmitter of mobile communications system."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D. Hoang whose telephone number is (571) 272-3184. The examiner can normally be reached on Monday-Friday 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Chieh can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TH

Thai Hoang

H Nguyen

HANH NGUYEN
PRIMARY EXAMINER